

# THE WAVE



***The newsletter publication of the International Microwave Power Institute***

***January 2021***



## **IMPI 55 to be Held Virtually; Abstracts Due February 1st**

The [55<sup>th</sup> Annual Microwave Power Symposium \(IMPI 55\)](#) will take place, virtually, from June 28-30, 2021 with a Solid State RF Energy Section Workshop on July 1<sup>st</sup>. Professor Jon Binner, of the University of Birmingham (UK), will serve as a Keynote Speaker with a talk entitled, “*Creating Materials for High and Ultra-High Temperature Applications using Microwaves and RF.*”

The deadline for abstract submission is just one week away. Authors should submit an abstract, between 2/3 of one-page and three-pages in length, to [info@impi.org](mailto:info@impi.org) to be considered for the Symposium. All authors will have the opportunity to submit an extended abstract, up to three-pages, in March for the Proceedings. The Call for Papers, relevant templates, and regular program updates [can be found here](#).

Similar to previous years, the Symposium will feature keynote addresses, invited papers, oral and poster presentations and panel discussions. IMPI 55 will also feature a Student Competition, virtual Exhibitor Showcase, breakout rooms and virtual networking opportunities.

Dr. Graham Brodie, of the University of Melbourne (Australia), will serve as the Chairman of the Technical Program Committee.

The IMPI 56 Symposium has already been booked for June 14-16, 2022 at the DeSoto Hotel in Savannah, Georgia, USA.

## **IN THIS EDITION OF *THE WAVE***

IMPI 55 Virtual Symposium.....	1
President’s Message .....	2
Utilizing Your IMPI Membership..	3
Welcome to Symphony Mw.....	3
In Memoriam: Roussy .....	4
Calendar of Events.....	4
Solid State RF Energy Section.....	5
Member News.....	5
JMPEE Vol 54 Published.....	6
Spring Webinar Update:.....	6
News from Around the Web.....	6
Connect with IMPI.....	6

*Cover Photos (from left):  
Keynote Speaker, Prof. Jon  
Binner, IMPI Pres. Bob  
Schiffmann, and TPC  
Chairman, Dr. Graham  
Brodie*

## PRESIDENT'S MESSAGE

The recent death of Prof. Georges Roussy, and my contact with Bob Decareau's daughter (see below), causes me to recall the many microwave scientists I have known and admired, and with whom I shared many enjoyable discussions – serious and frivolous - since joining IMPI in 1967, shortly after it was founded.

John E. Gerling: IMPI's first President, and a Founding Member of the Institute. His pioneering work in the area of industrial microwave heating created some of the first commercial industrial systems, such as the microwave chicken cooking (Litton). His son, John F. Gerling, is today's IMPI Treasurer.

Bill Brown of Raytheon: A Founding Member, and a Member of IMPI's first Board of Governors, his research resulted in such things as the Microwave Powered Helicopter (the first paper published in the first issue of the Journal of Microwave Power), and his early research on the conversion of solar energy into DC, was presented at the IMPI conference in 1969. I always considered Bill as my mentor.

James A Jolly: Jim was IMPI's second President, a Fellow of IMPI, and the person who suggested that I join IMPI. He was a microwave engineer and an educator, with many publications in our Journal, especially with insights into the role of technology transfer.

Jerry White: one of the brightest people I've ever known, I met Jerry 1967 at Varian Associates, and he developed two of the industrial microwave systems in which I was involved at that time. His paper "Why Materials Heat", that can be found in several issues the IMPI Proceedings, remains one of the best tutorials we've ever published.

George Freedman: was an Editor of the Journal, the Director of Raytheon's New Product Center, Chairman of IMPI's Board, a writer of children's books, and a wonderful humorist and speaker.

Nicolas Meisel: Was, for several years, IMPI's European Vice President, and the originator of industrial microwave vacuum systems, which were produced by his company, Les Mico-Ondes Industrielles, in France. He was always impeccably dressed, putting the rest of us to shame.

I could go on with many more names and at some point, I shall, but for now I just want to voice my gratitude for having known and worked with all of these people.

Now I'd like to turn my attention to the concept of Truth. So, "Who ya gonna believe, me or your own eyes?" (Chico Marx in Duck Soup). And, "Every man has the right to an opinion, but no man has a right to be wrong in his facts. Nor, above all, to persist in errors as to facts." (Bernard Baruch, 1946) ... The whole concept of Truth in the public sphere has become extremely controversial, as can be seen by the suggestion that there are "alternate facts". But, for those of us in the sciences, there are no such things as "alternative facts", although there are often alternate explanations of the meaning of the facts, and how they are interpreted. For example, the whole concept of tectonic plates was derided for many years, before it finally became accepted scientific theory. On the other hand, for me, the political world is filled with nonsense. Its population often deals with opinions, not facts, and these opinion-facts are often bent to suit particular situation or politician. We can't do that science. The great physicist Richard Feynman, once said, in describing how to determine some effect, "If it disagrees with the experiment, it's wrong!" We're constantly seeing, in the political world, the massaging of facts to try to uphold opinions and points of view.

Today's world is so fascinating, from a scientific point of view, it seems that every day there is at least one new discovery in many different scientific disciplines, so, who needs to listen to these massaged-opinions & truths. The world is a source of wonder, as is.

My wife & I had our initial vaccinations this week, so 2021 may prove to be more joyous than 2020. I hope it's that way for all of us.

Be well and stay safe,

*Bob Schiffmann, IMPI President*

## Make the Most of Your IMPI Membership This Year!

Happy New Year, IMPI Members! Please take a moment to do the following ten things to get the most out of your IMPI Membership this year:

- 1) **Utilize the Member Only Section of our Website.** The Members Only Section contains an archive of the Wave Newsletter, previously recorded webinars, and copies of past Proceedings and current Membership Roster; *You can log in at the top right-hand corner of [IMPI.org](http://impi.org) and the new password for 2021 will be sent to all current members by February 1<sup>st</sup>!*
- 2) **Access the Current Volume of JMPEE & the JMPEE Archive:** Members receive complimentary access to our peer-reviewed scientific Journal of Microwave Power & Electromagnetic Energy. If you need your log in instructions resent to you by our publisher, Taylor and Francis, email [alicia.standridge@impi.org](mailto:alicia.standridge@impi.org)
- 3) **Follow us on Social Media:** IMPI is very active on [LinkedIn](#), [Facebook](#), [Twitter](#) and now [Instagram](#)! We post important updates, upcoming event notices, and Corporate Member spotlights multiple times each week.
- 4) **Attend IMPI Webinars:** IMPI's Spring and Fall Webinar series are FREE for all IMPI members. Corporate members may invite anyone in their company to attend the 4-5 webinars we host each year. Learn more about the next Webinar Series [here](#).
- 5) **Join our Solid State RF Energy Section:** Membership in the Section is free of charge for 2021. You can learn more about the Section [here](#) and contact [alicia.standridge@impi.org](mailto:alicia.standridge@impi.org) to join the Section.
- 6) **Take Advantage of Member Pricing to the Symposium, Fall Seminar & Partner Events:** IMPI members receive discounted pricing for all IMPI Events and a number of our partners offer discounts to IMPI members as well. Stay up to date with the latest IMPI Events and Partner Events by visiting our [Calendar of Events](#).
- 7) **Send Us Your Job Listings:** Our new website features a Job Listings section. If your company has a job opening in the microwave/RF field, send your listing to [info@impi.org](mailto:info@impi.org) for inclusion on our site – free of charge.
- 8) **Send Us Your Member News:** Have you recently received an award? Published a book? Celebrated a personal or professional anniversary? The Wave Newsletter is always looking for content for our Member News section. Send your accomplishments to [info@impi.org](mailto:info@impi.org) for inclusion in a 2021 edition of *The Wave*.
- 9) **Advertise with Us:** In addition to Sponsorship opportunities at our events, IMPI now offers our members banner advertisement space on IMPI.org and in our newsletter. For rates, contact [molly.poisant@impi.org](mailto:molly.poisant@impi.org)
- 10) **Tell a Friend about IMPI:** Despite the pandemic, IMPI saw record growth in 2020, thanks in large part to you referring your colleagues. We are always looking to welcome new Corporate, Professional and Student Members into our family.

**IMPI Welcomes our 29<sup>th</sup> Corporate Member!**

**SYMPHONY**

Microwave Technologies

<http://www.symphony-microwave.com/>

## ***In Memoriam: Georges Roussy, Fellow of IMPI and AMPERE, and Jeannine Roussy***

*by Dr. A.C. "Ricky" Metaxas*

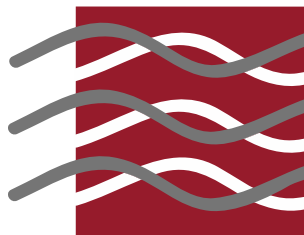
It is with great sadness that I report the deaths of Georges Roussy and his wife Jeannine within a few a days of each other on 31st December 2020 and 2nd January 2021 respectively. I have known Georges through my visits to the USA attending the annual IMPI Symposia but primarily through the biennial AMPERE conferences. Georges was highly regarded in the field of microwave heating as applied to many topics such as his pet subject of catalysis having set up a research group at the Laboratoire de Spectroscopie et des Techniques Microondes, Physicothermie Eletromagnetic at the University of Nancy, in France, a group largely supported by C.N.R.S. Many of the papers emanating from his group were seminal as was his book co-authored with J Pearce entitled, "Foundations of Industrial Applications of Microwaves and Radio Frequency Fields". Georges joined the Management Committee of AMPERE in 1997 during the meeting at Fermo and his counsel was always wise and punctuated with succinct arguments and indeed some humour. A graduate from one of the grandes écoles he fiercely supported centres of excellence such as his own. I recollect with fondness a meeting in Frankfurt at the beginning of the millennium about the next AMPERE conference to be staged at Bayreuth the following year. After the meeting we adjourned to a coffee house where he revealed that he was not going to drive back to Nancy immediately, but he was spending a couple of hours indulging in his hobby, philately, and visit a shop in the city where he knew they kept a special issue stamp he wanted to buy for his great collection.

Margaret has also fond memories of Jeannine. Like most of the accompanying contingent at the Ampere Conferences, Jeannine was an avid supporter and they spent many a happy hour bridging the language divide whilst enjoying the historic hotspots of the city. Jeannine had such a genuine personality and easily empathized with the mixed group they invariably were on an age and nationality level. She is remembered with affection for her sense of fun and caring nature.

The microwave fraternity will miss a great innovator and especially his unique way of delivering his papers often mesmerizing audiences.

### **CALENDAR OF EVENTS**

Stay up to date with everything going on at IMPI via our [Calendar of Events](#)! If you have an event you would like us to add, please email the event name, dates, time and description to [molly.poisant@impi.org](mailto:molly.poisant@impi.org)



# IMPI SOLID STATE RF ENERGY SECTION

The Solid State RF Energy Section continues to meet on a regular basis. The following update was provided by Section Chairman, Dr. Klaus Werner:

- EuMW workshop held virtually (High power industrial microwave applications); Q&A session not attended well; level of interest difficult to gauge
- Tagging initiative goes into the next round -> “beyond beta”; Transition from “blue sky” initiative to milestones and checkpoints
- planning spring webinar on plasma processes ongoing

Membership in the Section is open to all IMPI members; there is no additional fee to join. Those interested in more details should contact [alicia.standridge@impi.org](mailto:alicia.standridge@impi.org)

## Member News

### Please Help

Robert V. (Bob) Decareau (1926 - 2009), served as IMPI's President (1982-1983); an America food scientist and a pioneer in microwave heating applications for food processing. Bob was also a prolific author of several books related to the topic, as well as the editor & publisher of the Microwave Energy Applications Newsletter. His daughter, Maria Petit, has reached out to me, asking for any memorabilia: photos, articles, etc. about her father. If you have any to contribute, please send it directly to her: [maria.petit68@yahoo.com](mailto:maria.petit68@yahoo.com) or you can contact Bob Schiffmann at [microwaves@juno.com](mailto:microwaves@juno.com)

### SAIREM Seeking Microwave Scientists & Engineers

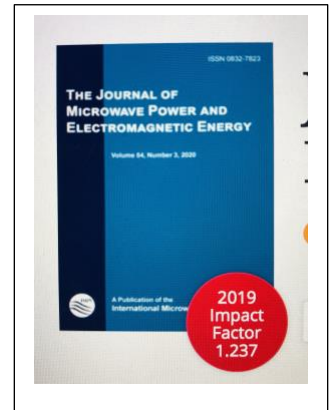
SAIREM continues its development in the industrial applications of microwave and radiofrequency energy. To maintain that growth, we are looking to recruit several different profiles (scientists, technicians/engineers, sales/marketing) and offer our employees an interesting career in a company at the forefront of technology with a multicultural and international workforce, where the human dimension is a key strength and core value in our activity. If you are interested in joining us, please send your application to [bschneyder@sairem.com](mailto:bschneyder@sairem.com). It will be studied with great attention.

*Do you have professional or personal news you would like to share in this section? Please send your submission to [molly.poisant@impi.org](mailto:molly.poisant@impi.org) by February 25, 2021 for inclusion in the March Newsletter.*

## JMPEE Volume 54 Now Available to Members!

Access to the full Volume 54 (and the entire JMPEE Archive) is available to members as part of your annual membership fee. Throughout December and January, Taylor & Francis, the publisher of JMPEE, has been emailing IMPI Members with log in instructions.

Please contact [alicia.standridge@impi.org](mailto:alicia.standridge@impi.org) if you need assistance with your JMPEE account.



## IMPI Spring Webinar Series

The topic for IMPI's Spring 2021 Webinar Series will be: **Microwave Food Processing.**

Dr. Juming Tang of Washington State University will serve as one of the instructors. Exact dates and times of the 2-part webinar Series will be added to the Events page as soon as details are available!

*Contact Dr. Sean McKeown of Graphic Packaging International if you have a topic or speaker to propose for the Spring or Fall Webinar Series.*

## News from Around the Web

Enval and [SAIREM partner](#) to accelerate plastic recycling process

The future is not what it used to be: [How digitization will revolutionize the food system](#)

Cleveland Clinic First in the World to [Use Latest Ablation Technology](#) to Destroy Large Liver Tumors

Scientists Believe US Embassy Staff and CIA Officers [Were Hit With High-Power Microwaves](#) – Here's How the Weapons Work

**The International Microwave Power Institute**

**PO Box 1140**

**Mechanicsville, VA 23111**

**[info@impi.org](mailto:info@impi.org) [www.impi.org](http://www.impi.org)**

***For the Latest News - Follow Us on Social Media***

